

华东地区为害竹筍的泉蝇属二新种

(双翅目: 花蝇科)

范 滋 德

(中国科学院华东昆虫研究所)

中国林业科学院在浙江工作的徐天森同志,采得一种为害竹筍的蝇类标本,交作者鉴定,經研究系一新种——毛笋泉蝇。稍后,南京林学院陈天璘同志亦寄来一种为害竹筍的泉蝇,外形极似前种而雄性尾器不同,系另一新种。同时这两种亦見于我所所藏的标本中,特将这两新种記述于下,正模标本都存我所,副模标本分別寄回中国林业科学院和南京林学院,并对采寄标本的徐、陈两同志表示感謝。

(一) 毛笋泉蝇 *Pegomyia phyllostachys* Fan, sp. nov. (图 1—4)

雄性 体长 7.5 毫米。

头 額很狹,間額深棕以至黑色,消失段約占額全长的 $1/4$,一側額狹于触角芒基部横径,額鬃列 7—8 个,新月片和头部前面粉被銀灰色,唯下側顏底色稍带黄棕色,后者裸,側顏稍比触角第三节为寬;触角长,有时达于口前緣,黑色,第二节約为第三节的 $1/2$ 长,末端常微带棕黄色,芒亦黑色,具短毳毛;侧面观額角稍突出,而髁角不很突出,髁在口前緣的紧下方;顏堤仅在下端有一小鬃(有时一側缺如);頰高为眼高的 $1/4$;后头灰色,其上部微凹,而侧后头下半显然膨隆,后头及頰的毛略密,全黑,頰前方的刚毛有数个指向前上方。中喙长約为高的三倍弱。下顎須不很寬,端部黑色段超过全长之半,基部黄色。

胸 灰色,被淡灰色粉被;盾片有一暗色正中条,向盾沟去变細,未达小盾沟即消失;在前背中鬃列的前方、第一后背中鬃的内方和第二后背中鬃的外方各有不完整的纵条;小盾片端部及其下面有时略带黄色。胸部側板灰色。鬃序:中鬃 $1 + 1$ (少数为 2),此外尚有 2 行小毛列,前中鬃間距略等于它与前背中鬃列間距;背中鬃 $2 + 3$,肩后鬃 3,前方两个頗接近;翅内鬃 $0 + 2$,翅前鬃长大,长約为第一后背中鬃长的 $6/7$;翅上鬃 1,肩鬃 3,背側片无小毛,具二鬃,翅后鬃 2,小盾基鬃、心鬃、亚端鬃各一对、端鬃細而明显;腹側片鬃 2: (3—4);前中側片鬃常存在 (1—3 个),有时缺;下側背片具淡色毳毛;前气門灰色。翅:透明,翅基微黄, r_{4+5} 脉終末于翅尖的前方, m_{1+2} 脉至近末端处几乎与 r_{4+5} 脉并行,前緣刺常不发达,前緣基鳞、亚前緣骨片、腋瓣均淡黄色,上、下腋瓣后緣相齐 (少数下腋瓣略短;平衡棒黄色。足:黄色,有时在前足股节后面有小片灰色,唯各跗节带黑色,爪及爪垫均长大,显然超过第五分跗节的长度。前足:股节背鬃列約由 13 个鬃組成,后腹鬃列完整,前腹面的鬃短小,仅及后腹鬃长的 $1/2$,且端部 $2/5$ 长度内无鬃;脛节具前背鬃、后腹鬃各 1。中足:股节基部 $1/4$ 长度内具背鬃列,基部 $3/7$ 长度内具約由 6 个鬃組成的后腹鬃列;脛

节前腹鬃和前背鬃各 1, 后鬃 3。后足: 股节背方端部 1/3 长度内有鬃毛羣, 并具密的前背鬃列和頗疏的后背鬃列; 脛节前腹鬃 1, 前背鬃 3, 后背鬃 3。

腹 侧面观腹与胸部(連小盾片)等长, 不特別細长, 但显較胸部为狹, 呈背腹略扁的长錐形; 第一、二合背板最长, 几乎为第三背板的 2 倍长, 以后各节順次較短; 包括尾节在內都复灰色粉被, 正中暗色縱条非常明显且輪廓明确, 在第三背板上其寬度約为节长的 1/6 左右, 并向后延伸到第七、八合腹节上, 此外还可隱約見到暗色的前緣帶。除第一、二合背板的中緣鬃不发达外, 所有前腹部的各背板的緣鬃都发达。第三腹板側緣直, 長約为寬的二倍; 第五腹板稍短, 仅略突出, 后緣中部具成簇的剛毛, 側叶不突立于腹下, 全部具粉被, 后緣不向內卷; 尾节明显, 但不呈球状突出, 第九背板无刺状鬃, 在側后腹角表面具小片淡色絨毛被; 肛尾叶心脏形, 縱走的愈合縫明晰可見, 从后面观端部不很尖狹; 側尾叶长, 基部內面具逆生的淡色絨毛丛, 侧面观具弧形的前緣, 中腰細而端部稍寬, 末端圓鈍; 后面观直, 近端部內緣有一下指的短突, 短突偏生在后方, 亚基部后面有一斜走的隆脊; 前阳基側突相当寬大而表面平滑, 在尖的末端上着生一支短毛, 其后外突端部具二支长剛毛。后阳基側突叶状, 表面不很平滑, 在前緣的亚基部具一末端略弯向內方的中等长的刺。

产地 浙江: 安吉(模式产地, 2♂♂, 1963 年徐天森寄贈), 杭州(2♂♂, 1936, IV., 20 采)。

生态习性 据徐天森同志 1963 年 5 月 23 日通訊称幼虫食害竹筍, 以毛竹 (*Phyllostachys pubescens* Mazel ex H. de Lehaie) 为主, 另外剛竹 (*Ph. bambusoides* Sieb. et Zucc.)、淡竹 (*Ph. nigra* var. *henonis* (Mitf.) Stapf. ex Rendle)、桂竹 (*Ph. makinoi* Hayata) 及紅竹, 均有受害。

从外形上看, 本新种与克什米尔地区产的 *P. atroapicata* Mall. 有若干相似, 但后者的雄性前足股节、中足和后足股节的端部黑色, 中足脛节的基部微暗, 特别是在后足脛节上有一很长的近中位后鬃。产于台湾省的狭腹泉蝇 *P. angustiventris* Stein, 1918 与本新种亦頗近似, 它除了雄性腹部显然細长如棍軸状外, 后足脛节前面的鬃大多为 2 个, 可以与本新种区别。

(二) 江苏泉蝇 *Pegomyia kiangsuensis* Fan, sp. nov. (图 5—7)

雄性 体长 6.5—8.5 毫米。

外形几与前种相同。唯有下列各点不同: 第三腹板側緣膨曲, 長約为寬的 $1\frac{1}{2}$ 倍。第五腹板相当长而側叶較突出于腹下, 其后部缺粉被呈亮黑褐色, 并有楞状紋达于內卷的后緣, 后緣內卷, 內角透明。肛尾叶末端尖狹; 側尾叶近端部內緣亦有一下指的短突, 侧面观着生于中央, 亚基部后面內、外方各有一不很高的小結节, 內方的小結节稍低, 且沿后緣下延成脊状。前阳基側突的后外突稍长, 端部具 4(3—5) 支长剛毛。

产地 江苏: 南京(下蜀, 模式产地, 55♂♂, 1963, V. 陈天磷寄贈), 松江(佘山, 11♂♂, 1963, IV., 5. 蔣文斌采)。

生态习性 幼虫为害竹笋相当严重(据 1963 年 10 月 15 日陈天磷同志談)。

TWO NEW FLIES OF THE GENUS *PEGOMYIA* R.-D., ATTACKING BOMBOO SHOOT IN EAST CHINA (DIPTERA, ANTHOMYIIDAE)

FAN TZE-TEH

(East China Entomological Institute, Academia Sinica)

In the present paper are described two new species of anthomyiid fly, their maggots having been found to attack the bomboo shoots in East China. The descriptions are mainly based upon those materials sent for identification by Comrade Hsü Tien-seng, Chinese Forestry Academy, collected from Chekiang province and by Comrade Chen Tien-ling, Nanking Forestry College, from the vicinity of Nanking, and partly upon those already in our collections. The holotypes of both species are deposited in this Institute, and the paratypes have been returned respectively to the contributors.

1. *Pegomyia phyllostachys* Fan, sp. nov.

♂: Body length 7.5 mm, general color grey, somewhat fuscous on dorsum.

Frons very narrow; antennae black, tinged with brownish on the apex of 2nd joint in some cases, 3rd joint about twice of the 2nd, arista short pubescent; palpi slender, blackish in apical half and yellowish basally; haustellum pollinose.

Acrostichals 1 + 1, prealar strong, sternopleurals 2:(3—4). Wings hyaline, slightly pale yellowish; the ventral side of costa partially with minute setae. Calypteron light yellow, the upper as long as the lower. Halteres yellow. Legs yellow, but the tarsi brownish black. There are 1 anterodorsal and 1 posteroventral bristle on the fore tibia, 1 anterodorsal, 1 anteroventral and 3 posterior bristles on the middle tibia, and 3 anterodorsals, 1 anteroventral and 3 posterodorsals on the hind tibia.

Abdomen not so slender, but rather narrower than the thorax (in dorsal view), and about equal to the latter (including the scutellum) in length in profile; distinctly with a median narrow black stripe on the tergites, extending to 7—8 synsternite. The 3rd sternite with straight sides, twice as long as broad. 5th sternite rather short and less protrusive, its arms (lateral lobes) pollinose extensively, posterior margin never rolling up. Hypopygium less produced. Anal cerci heart-shaped, not very narrowed apically. Surstylus has a downward short preapical projection on the inner posterior margin and a subbasal ridge running obliquely. On the anterior gonopophysis armed with 2 very long setae, and a subbasal moderately long spine beneath the posterior gonopophysis, adjacent to which, there is a membranous appendix.

Locality: Prov. Chekiang (An-gi, type locality, 2♂♂, 1963. leg. Hsü Tien-seng; Hangchow, 2♂♂).

Bionomics: The larvae usually attack the shoots of *Phyllostachys pubescens* Mazil ex H. de Lehaie, and sometimes live in those of *Ph. bambusoides* Sieb. et Zucc., *Ph. nigra* var. *henonis* (Mitf.) Stapf. ex Rendle, *Ph. makinoi* Hayata etc. (According to a correspondence from Comrade Hsü, 1963, V, 23.)

It differs from the Kashmiran species *P. atroapicata* Malloch in the color of legs and

in the chaetotaxy of the hind tibia, also from *P. angustiventris* Stein, occurring in Taiwan Prov., in general shape of abdomen and in the chaetotaxy of the hind tibia.

2. *Pegomyia kiangsuensis* Fan, sp. nov.

♂: Body length 6.5—8.5 mm. It is very difficult to distinguish the male of the present species from that of the preceding one on the external characters other than the shape of 5th sternite as well as on the male terminalia.

3rd sternite with bent sides, one and half as long as broad. 5th sternite rather long and protrusive, arms (lateral lobes) largely glossy and brownish black, each with a pellucid inner corner, its surface with numerous fine wavy ridges running to the posterior margin, that is distinctly turning inward.

Anal cerci narrowly pointed to the apex. Surstylus has a downward short preapical projection on the inner middle margin and two subbasal protuberances (outer and inner) fairly rising on the posterior surface instead of a ridge as in preceding species. Outer posterior process on the anterior gonopophysis rather long, armed with 4(3—5) very long setae.

Locality: Prov. Kiangsu (Shia-suh, vicinity of Nanking, type locality, 55 ♂♂, 1963, V. leg. Chen Tien-ling; Hill Zoshan, Song-kiang, 11 ♂♂, 1963, IV, 5. coll. Chiang Wen-ping).

Bionomics: The larvae attack bamboo shoots seriously. (According to the communication from Comrade Chen, 1963, X, 15.)

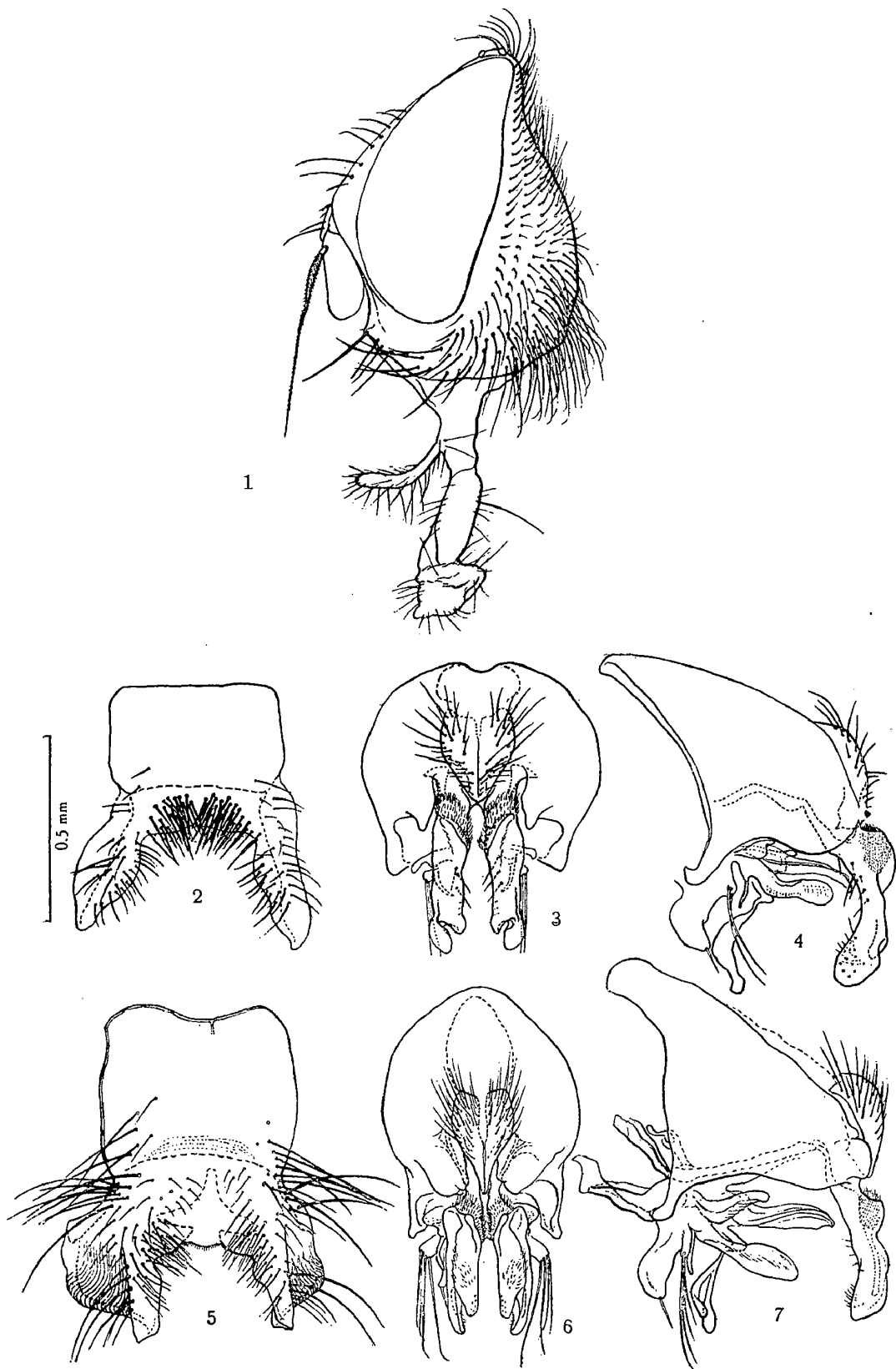


图1—4 毛笏泉蝇 *Pegomyia phyllostachys* Fan, sp. nov. (安吉产)
 图5—7, 江苏泉蝇 *Pegomyia kiangsuensis* Fan, sp. nov. (下蜀产)。
 图1 头部侧面观;
 图2, 5. 第五腹板腹面观;图3, 6. 尾器后面观;图4, 7. 尾器侧面观。